

RAW SEQUENCE LISTING                      DATE: 08/01/2000  
 PATENT APPLICATION:    US/08/475,470A            TIME: 11:58:40

Input Set : A:\Pto.amc  
 Output Set: N:\CRF3\08012000\H475470A.raw

# ENTERED

## SEQUENCE LISTING

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4 (1) GENERAL INFORMATION:
C--> 6   (i) APPLICANT: Samulski, Richard J.
7       Walsh, Christopher E.
8       Nienhuis, Arthur W.
9       Liu, Johnson M.
10      Miller, Jeffrey L.
12   (ii) TITLE OF INVENTION: Adeno-Associated Virus Vector and
13       Cis-Acting Regulatory and Promoter Elements Capable of
14       Expressing At Least One Globin Gene and Methods of Using
15       the Same for Gene Therapy
17   (iii) NUMBER OF SEQUENCES: 20
19   (iv) CORRESPONDENCE ADDRESS:
20       (A) ADDRESSEE: Eckert Seamans Cherin & Mellott
21       (B) STREET: 1700 Market Street, Suite 3232
22       (C) CITY: Philadelphia
23       (D) STATE: PA
24       (E) COUNTRY: USA
25       (F) ZIP: 19003
27   (v) COMPUTER READABLE FORM:
28       (A) MEDIUM TYPE: Floppy disk
29       (B) COMPUTER: IBM PC compatible
30       (C) OPERATING SYSTEM: PC-DOS/MS-DOS
31       (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
33   (vi) CURRENT APPLICATION DATA:
C--> 34       (A) APPLICATION NUMBER: US/08/475,470A
C--> 35       (B) FILING DATE: 07-Jun-1995
36       (C) CLASSIFICATION:
38   (viii) ATTORNEY/AGENT INFORMATION:
39       (A) NAME: Gould, Jr., Lewis F.
40       (B) REGISTRATION NUMBER: 25,057
41       (C) REFERENCE/DOCKET NUMBER: 115132-4
43   (ix) TELECOMMUNICATION INFORMATION:
44       (A) TELEPHONE: 215/575-6000
45       (B) TELEFAX: 215/575-6015
48 (2) INFORMATION FOR SEQ ID NO: 1:
50   (i) SEQUENCE CHARACTERISTICS:
51       (A) LENGTH: 20 base pairs
52       (B) TYPE: nucleic acid
53       (C) STRANDEDNESS: single
54       (D) TOPOLOGY: linear
W--> 56   (ii) MOLECULE TYPE: oligonucleotide
60   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
62 TCGCTTCTGG AACGTCTATC
64 (2) INFORMATION FOR SEQ ID NO: 2:
66   (i) SEQUENCE CHARACTERISTICS:
67       (A) LENGTH: 20 base pairs

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20

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68          (B) TYPE: nucleic acid
69          (C) STRANDEDNESS: single
70          (D) TOPOLOGY: linear
W--> 72      (ii) MOLECULE TYPE: oligonucleotide
76          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
78 CACCTTCTTG CCATGTGCCT                               20
80 (2) INFORMATION FOR SEQ ID NO: 3:
82      (i) SEQUENCE CHARACTERISTICS:
83          (A) LENGTH: 24 base pairs
84          (B) TYPE: nucleic acid
85          (C) STRANDEDNESS: single
86          (D) TOPOLOGY: linear
W--> 88      (ii) MOLECULE TYPE: oligonucleotide
92          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
94 CATTGTGATG GACTCCGGAG ACGG                               24
96 (2) INFORMATION FOR SEQ ID NO: 4:
98      (i) SEQUENCE CHARACTERISTICS:
99          (A) LENGTH: 24 base pairs
100         (B) TYPE: nucleic acid
101         (C) STRANDEDNESS: single
102         (D) TOPOLOGY: linear
W--> 104     (ii) MOLECULE TYPE: oligonucleotide
108         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
110 CATCTCCTGC TCGAAGTCTA GAGC                               24
112 (2) INFORMATION FOR SEQ ID NO: 5:
114     (i) SEQUENCE CHARACTERISTICS:
115         (A) LENGTH: 20 base pairs
116         (B) TYPE: nucleic acid
117         (C) STRANDEDNESS: single
118         (D) TOPOLOGY: linear
W--> 120     (ii) MOLECULE TYPE: oligonucleotide
124         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
126 GTTGGGAGTG AAGAAACTGC                               20
128 (2) INFORMATION FOR SEQ ID NO: 6:
130     (i) SEQUENCE CHARACTERISTICS:
131         (A) LENGTH: 20 base pairs
132         (B) TYPE: nucleic acid
133         (C) STRANDEDNESS: single
134         (D) TOPOLOGY: linear
W--> 136     (ii) MOLECULE TYPE: oligonucleotide
140         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
142 TAGCCTCAGA CTCTGTTTGC                               20
144 (2) INFORMATION FOR SEQ ID NO: 7:
146     (i) SEQUENCE CHARACTERISTICS:
147         (A) LENGTH: 22 base pairs
148         (B) TYPE: nucleic acid
149         (C) STRANDEDNESS: single
150         (D) TOPOLOGY: linear
W--> 152     (ii) MOLECULE TYPE: oligonucleotide

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Input Set : A:\Pto.amc  
 Output Set: N:\CRF3\08012000\H475470A.raw

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156      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
158 CTACACCAAC GTAACCTATC CC                                22
160 (2) INFORMATION FOR SEQ ID NO: 8:
162      (i) SEQUENCE CHARACTERISTICS:
163          (A) LENGTH: 22 base pairs
164          (B) TYPE: nucleic acid
165          (C) STRANDEDNESS: single
166          (D) TOPOLOGY: linear
W--> 168      (ii) MOLECULE TYPE: oligonucleotide
172      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
174 TTCTCCGGCG CTAAAAATG CG                                22
176 (2) INFORMATION FOR SEQ ID NO: 9:
178      (i) SEQUENCE CHARACTERISTICS:
179          (A) LENGTH: 15 base pairs
180          (B) TYPE: nucleic acid
181          (C) STRANDEDNESS: single
182          (D) TOPOLOGY: linear
W--> 184      (ii) MOLECULE TYPE: oligonucleotide
188      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
190 GAACGCGCAG CCGCC                                       15
192 (2) INFORMATION FOR SEQ ID NO: 10:
194      (i) SEQUENCE CHARACTERISTICS:
195          (A) LENGTH: 20 base pairs
196          (B) TYPE: nucleic acid
197          (C) STRANDEDNESS: single
198          (D) TOPOLOGY: linear
W--> 200      (ii) MOLECULE TYPE: oligonucleotide
204      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
206 GCGCATCAGA ATTGGGATTC                                  20
208 (2) INFORMATION FOR SEQ ID NO: 11:
210      (i) SEQUENCE CHARACTERISTICS:
211          (A) LENGTH: 15 base pairs
212          (B) TYPE: nucleic acid
213          (C) STRANDEDNESS: single
214          (D) TOPOLOGY: linear
W--> 216      (ii) MOLECULE TYPE: oligonucleotide
220      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
222 AGTAGCATGG CGGGT                                       15
224 (2) INFORMATION FOR SEQ ID NO: 12:
226      (i) SEQUENCE CHARACTERISTICS:
227          (A) LENGTH: 21 base pairs
228          (B) TYPE: nucleic acid
229          (C) STRANDEDNESS: single
230          (D) TOPOLOGY: linear
W--> 232      (ii) MOLECULE TYPE: oligonucleotide
236      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
238 CGCGCATAAG CCAGTAGAGC C                                21
240 (2) INFORMATION FOR SEQ ID NO: 13:
242      (i) SEQUENCE CHARACTERISTICS:

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RAW SEQUENCE LISTING                      DATE: 08/01/2000  
 PATENT APPLICATION: US/08/475,470A        TIME: 11:58:40

Input Set : A:\Pto.amc  
 Output Set: N:\CRF3\08012000\H475470A.raw

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243          (A) LENGTH: 25 base pairs
244          (B) TYPE: nucleic acid
245          (C) STRANDEDNESS: single
246          (D) TOPOLOGY: linear
W--> 248      (ii) MOLECULE TYPE: oligonucleotide
252          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
254 GGAATTCAGG AACCCCTAGT GATGG                                     25
256 (2) INFORMATION FOR SEQ ID NO: 14:
258          (i) SEQUENCE CHARACTERISTICS:
259              (A) LENGTH: 21 base pairs
260              (B) TYPE: nucleic acid
261              (C) STRANDEDNESS: single
262              (D) TOPOLOGY: linear
W--> 264      (ii) MOLECULE TYPE: oligonucleotide
268          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
270 ACAATGGCCA GGGCCAGGCA G                                         21
272 (2) INFORMATION FOR SEQ ID NO: 15:
274          (i) SEQUENCE CHARACTERISTICS:
275              (A) LENGTH: 24 base pairs
276              (B) TYPE: nucleic acid
277              (C) STRANDEDNESS: single
278              (D) TOPOLOGY: linear
W--> 280      (ii) MOLECULE TYPE: oligonucleotide
284          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
286 CACAGACTAT GGTCCAGGTG AAGG                                     24
288 (2) INFORMATION FOR SEQ ID NO: 16:
290          (i) SEQUENCE CHARACTERISTICS:
291              (A) LENGTH: 24 base pairs
292              (B) TYPE: nucleic acid
293              (C) STRANDEDNESS: single
294              (D) TOPOLOGY: linear
W--> 296      (ii) MOLECULE TYPE: oligonucleotide
300          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:
302 ACCAGGAGTA CCGAAGCTCA CTTG                                     24
304 (2) INFORMATION FOR SEQ ID NO: 17:
306          (i) SEQUENCE CHARACTERISTICS:
307              (A) LENGTH: 24 base pairs
308              (B) TYPE: nucleic acid
309              (C) STRANDEDNESS: single
310              (D) TOPOLOGY: linear
W--> 312      (ii) MOLECULE TYPE: oligonucleotide
316          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:
318 AATTACTGAT GTCGGCAGCC GAAC                                     24
320 (2) INFORMATION FOR SEQ ID NO: 18:
322          (i) SEQUENCE CHARACTERISTICS:
323              (A) LENGTH: 24 base pairs
324              (B) TYPE: nucleic acid
325              (C) STRANDEDNESS: single
326              (D) TOPOLOGY: linear

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RAW SEQUENCE LISTING                      DATE: 08/01/2000  
PATENT APPLICATION:    US/08/475,470A        TIME: 11:58:40

Input Set : A:\Pto.amc  
Output Set: N:\CRF3\08012000\H475470A.raw

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W--> 328      (ii) MOLECULE TYPE: oligonucleotide
332      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:
334 TTATGATGTC TGGATCCGGC CTTG                                24
336 (2) INFORMATION FOR SEQ ID NO: 19:
338      (i) SEQUENCE CHARACTERISTICS:
339          (A) LENGTH: 20 base pairs
340          (B) TYPE: nucleic acid
341          (C) STRANDEDNESS: single
342          (D) TOPOLOGY: linear
W--> 344      (ii) MOLECULE TYPE: oligonucleotide
348      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:
350 TCTCAGCCTA GAGTGATGAC                                20
352 (2) INFORMATION FOR SEQ ID NO: 20:
354      (i) SEQUENCE CHARACTERISTICS:
355          (A) LENGTH: 20 base pairs
356          (B) TYPE: nucleic acid
357          (C) STRANDEDNESS: single
358          (D) TOPOLOGY: linear
W--> 360      (ii) MOLECULE TYPE: oligonucleotide
364      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 20:
366 ATAGTAGCCT TGTCTCCTC                                20
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## VERIFICATION SUMMARY

DATE: 08/01/2000

PATENT APPLICATION: US/08/475,470A

TIME: 11:58:41

Input Set : A:\Pto.amc

Output Set: N:\CRF3\08012000\H475470A.raw

L:6 M:220 C: Keyword misspelled or invalid format, [(i) APPLICANT:]  
L:34 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]  
L:35 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]  
L:56 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=1, Value=[oligonucleotide]  
L:72 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=2, Value=[oligonucleotide]  
L:88 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=3, Value=[oligonucleotide]  
L:104 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=4, Value=[oligonucleotide]  
L:120 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=5, Value=[oligonucleotide]  
L:136 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=6, Value=[oligonucleotide]  
L:152 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=7, Value=[oligonucleotide]  
L:168 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=8, Value=[oligonucleotide]  
L:184 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=9, Value=[oligonucleotide]  
L:200 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=10, Value=[oligonucleotide]  
L:216 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=11, Value=[oligonucleotide]  
L:232 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=12, Value=[oligonucleotide]  
L:248 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=13, Value=[oligonucleotide]  
L:264 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=14, Value=[oligonucleotide]  
L:280 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=15, Value=[oligonucleotide]  
L:296 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=16, Value=[oligonucleotide]  
L:312 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=17, Value=[oligonucleotide]  
L:328 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=18, Value=[oligonucleotide]  
L:344 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=19, Value=[oligonucleotide]  
L:360 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=20, Value=[oligonucleotide]

STATISTICS SUMMARY

PATENT APPLICATION: US/08/475,470A

DATE: 08/01/2000

TIME: 11:58:41

Input Set : A:\Pto.amc

Output Set: N:\CRF3\08012000\H475470A.raw

Application Serial Number: US/08/475,470A

Alpha or Numeric: Alpha

Application Class:

Application File Date: 06-07-1995

Art Unit:

Software Application: PatentIn

Total Number of Sequences: 20

Number of Errors: 0

Number of Warnings: 20

Number of Corrections: 3

MESSAGE SUMMARY

220 C: 3 (Keyword misspelled or invalid format)

246 W: 20 (Invalid value of Alpha Sequence Header Field)

File View Edit Tools Window Help

Drafts  
 Pending  
 Active  
 L1: (243) (promoter\$ or expression adj control\$) same ((aav or adenoassociated or  
 L2: (243) (promoter\$ or expression adj control\$4) same ((aav or adenoassociated or  
 L3: (1218) aav\$1 or adenoassociated or adeno adj associated  
 L4: (2941) globin  
 L5: (31) 3 with 4  
 L6: (40) 3 same 4  
 L7: (9) 6 not 5  
 Failed  
 Saved  
 (799) aav or adenoassociated or adeno adj associated  
 (176305) transduc\$ or vector\$  
 (620) (aav or adenoassociated or adeno adj associated) same (transduc\$ or vector\$  
 (38568) promoter\$ or expression adj control\$  
 (159) (promoter\$ or expression adj control\$) same ((aav or adenoassociated or ad  
 (799) aav or adenoassociated or adeno adj associated  
 (176305) transduc\$ or vector\$  
 (38623) promoter\$ or expression adj control\$4  
 (620) (aav or adenoassociated or adeno adj associated ) same (transduc\$ or vecto  
 (339) mosher.xa. or mosher.xp.

Search: [USPAT] Plurals Synonyms  
 Default operator: OR Highlight all hit terms initially

BRS form ISAR form Image Text

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition
1	BRS	L1	243	(promoter\$ or expression adj control\$) same ((aav or adenoassociated or adeno adj associated) same (transduc\$ or vector\$))	USPAT	2000/10/23 11:43		Truncation Overflow. Return string from Server is: 5'0'0'PRO
2	BRS	L2	243	(promoter\$ or expression adj control\$4) same ((aav or adenoassociated or adeno adj associated ) same (transduc\$ or vector\$ ))	USPAT	2000/10/23 11:52		
3	BRS	L3	1218	aav\$1 or adenoassociated or adeno adj associated	USPAT	2000/10/23 11:55		
4	BRS	L4	2941	globin	USPAT	2000/10/23 11:55		
5	BRS	L5	31	3 with 4	USPAT	2000/10/23 12:06		
6	BRS	L6	40	3 same 4	USPAT	2000/10/23 12:06		
7	BRS	L7	9	6 not 5	USPAT	2000/10/23 12:06		



File View Edit Tools Window Help

Drafts  
 Pending  
 Active  
 Failed  
 Saved

- (799) aav or adenoassociated or adeno adj associated
- (176305) transduc\$ or vector\$
- (620) (aav or adenoassociated or adeno adj associated) same (transduc\$ or vector\$)
- (38568) promoter\$ or expression adj control\$
- (159) (promoter\$ or expression adj control\$) same ((aav or adenoassociated or adeno adj associated) same (transduc\$ or vector\$))
- (799) aav or adenoassociated or adeno adj associated

DBs: USPAT ☐ Plurals ☐ Synonyms  
 Default operator: OR ☒ Highlight all hit terms initially

BRS form ISAR form Image Text

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition
1	BRS	L1	243	(promoter\$ or expression adj control\$) same ((aav or adenoassociated or adeno adj associated) same (transduc\$ or vector\$))	USPAT	2000/10/23 11:43		Truncation Overflow. Return string from Server is: 5'0'0'PRO
2	BRS	L2	243	(promoter\$ or expression adj control\$4) same ((aav or adenoassociated or adeno adj associated ) same (transduc\$ or vector\$ ))	USPAT	2000/10/23 12:08		
3	BRS	L3	1218	aav\$1 or adenoassociated or adeno adj associated	USPAT	2000/10/23 12:11		
4	BRS	L4	2941	globin	USPAT	2000/10/23 11:55		
5	BRS	L5	31	3 with 4	USPAT	2000/10/23 12:06		
6	BRS	L6	40	3 same 4	USPAT	2000/10/23 12:06		
7	BRS	L7	9	6 not 5	USPAT	2000/10/23 12:06		
8	BRS	L8	44	(promoter\$ or expression adj control\$4) same ((aav or adenoassociated or adeno adj associated ) same (transduc\$ or vector\$ ))	EPO; JPO; Derwent	2000/10/23 12:09		
9	BRS	L9	40	(aav\$1 or adenoassociated or adeno adj associated) same globin	USPAT	2000/10/23 12:12		
10	BRS	L10	1	(aav\$1 or adenoassociated or adeno adj associated) same globin	EPO; JPO; Derwent	2000/10/23 12:12		

File Details



L1: (799) aav or adenoasso  
 L2: (176305) transduc\$ or  
 L3: (620) 1 same 2  
 L4: (38568) promoter\$ or e  
 L5: (159) 4 same 3

Search [ ] Browse Queue Clear

DBs: USPAT

☐ Plurals ☐ Synonyms

4 same 3

BRS term BSR term Image Text

Document ID	Issue Da	Title	Inventor	Current
1 US 5981487 A	19991109	Method of inhibiting smooth muscle cell proliferation	Koch, Walter J. , et al.	514/12
2 US 5980886 A	19991109	Recombinant vectors for reconstitution of liver	Kay, Mark A. , et al.	424/95
3 US 5976873 A	19991102	Nucleic acid sequences controlling lung cell-specific gene expression	Bohinski, Robert J. , et al.	435/32
4 US 5976800 A	19991102	Enhancement of cancer cell death	Lau, Allan S. , et al.	435/6
5 US 5972705 A	19991026	Sequence-specific methylation of ribonucleic acid	Fournier, Maurille J. , et al.	435/44
6 US 5972697 A	19991026	NIMA interacting proteins	Hunter, Tony , et al.	435/32
7 US 5972616 A	19991026	TADG-15: an extracellular serine protease overexpressed in breast and	O'Brien, Timothy J. , et al.	435/6
8 US 5972339 A	19991026	Method of eliciting anti-HIV-1 helper T cell responses	Walker, Bruce D.	424/18
9 US 5968750 A	19991019	Humanized green fluorescent protein genes and methods	Zolotukhin, Sergei , et al.	435/6
10 US 5965790 A	19991012	SR-BI regulatory sequences and therapeutic methods of use	Acton, Susan Laurene	800/18
11 US 5965441 A	19991012	HSV/AAV hybrid amplicon vectors	Breakefield, Xandra O. , et al.	435/45
12 US 5962325 A	19991005	Three-dimensional stromal tissue cultures	Naughton, Gail K. , et al.	435/39
13 US 5962313 A	19991005	Adeno-associated virus vectors comprising a gene encoding a lysosomal	Podsakoff, Gregory M. , et al.	435/32
14 US 5962265 A	19991005	Human signal transduction serine/threonine kinase	Norris, Tyrrell Errick , et al.	435/69
15 US 5959081 A	19990928	Zinc binding LIM protein S2-6	Lecka-Czernik, Beata	530/35
16 US 5958768 A	19990928	Chimeric antiviral agents comprising Rev binding nucleic acids and	Kraus, Gunter , et al.	435/37
17 US 5952467 A	19990914	NIMA interacting proteins	Hunter, Tony , et al.	530/35
18 US 5952221 A	19990914	Adeno-associated virus vectors comprising a first and second nucleic	Kurtzman, Gary J. , et al.	435/32
19 US 5952190 A	19990914	cDNA for fanconi anemia complementation group A	Joenje, Hans , et al.	435/30
20 US 5948647 A	19990907	Nucleic acids encoding antigen-binding sites specific for cancer antigens	Ring, David B.	435/69
21 US 5948646 A	19990907	Methods for preparation of vaccines against cancer comprising heat shock	Srivastava, Pramod K.	435/69
22 US 5948640 A	19990907	Mammalian additional sex combs (mammalian Asx) acts as a tumor suppressor	Randazzo, Filippo M.	435/69
23 US 5945335 A	19990831	Adenovirus helper-free system for producing recombinant AAV virions	Colosi, Peter	435/36

File Details

Start EAST [Default E



L1: (799) aav or adenoasso  
 L2: (176305) transduc\$ or  
 L3: (620) 1 same 2  
 L4: (38568) promoter\$ or e  
 L5: (159) 4 same 3

   

DB: USPAT

☐ Plurals ☐ Synonyms

4 same 3

   

	Document ID	Issue Da	Title	Inventor	Current
24	US 5942400 A	19990824	Assays for detecting .beta.-secretase	Anderson, John P. , et al.	435/7.
25	US 5942395 A	19990824	Hybrid ribozymes and methods of use	Fournier, Maurille J. , et al.	435/6
26	US 5939540 A	19990817	Platelet secretory transport protein	Reed, Guy L.	536/23
27	US 5939538 A	19990817	Methods and compositions for inhibiting HIV infection of cells by	Leavitt, Markley C. , et al.	536/23
28	US 5928941 A	19990727	Repressor kruppel-like factor	Lee, Mu-En , et al.	435/32
29	US 5922601 A	19990713	High efficiency gene trap selection of regulated genetic loci	Baetscher, Manfred , et al.	435/45
30	US 5919677 A	19990706	Eukaryotic and retroviral antisense initiator elements	Ludwig, Linda B.	435/91
31	US 5919652 A	19990706	Nucleic acid molecules comprising the prostate specific antigen (PSA)	Pang, Shen , et al.	435/65
32	US 5919620 A	19990706	Heat shock protein HSP72 of Streptococcus pneumoniae	Brodeur, Bernard R. , et al.	435/6
33	US 5916763 A	19990629	Promoter for VEGF receptor	Williams, Lewis T. , et al.	435/69
34	US 5914318 A	19990622	Transgenic plants expressing lepidopteran-active .delta.-endotoxins	Baum, James A. , et al.	514/12
35	US 5914266 A	19990622	Mammalian sex comb on midleg (mammalian SCM) acts as a tumor suppressor	Randazzo, Filippo	435/32
36	US 5905146 A	19990518	DNA binding protein S1-3	Lecka-Czernik, Beata	536/23
37	US 5902880 A	19990511	RNA polymerase III-based expression of therapeutic RNAs	Thompson, James	536/24
38	US 5902741 A	19990511	Three-dimensional cartilage cultures	Purchio, Anthony F. , et al.	435/32
39	US 5891857 A	19990406	Characterized BRCA1 and BRCA2 proteins and screening and therapeutic	Holt, Jeffrey T. , et al.	514/44
40	US 5883081 A	19990316	Isolation of novel HIV-2 proviruses	Kraus, Gunter , et al.	514/44
41	US 5880277 A	19990309	Ribozyme cleavage of 5.alpha.-reductase mRNA	Scanlon, Kevin J. , et al.	536/24
42	US 5876939 A	19990302	FAS associated proteins	Reed, John C. , et al.	435/6
43	US 5877021 A	19990302	B7-1 targeted ribozymes	Stinchcomb, Dan T. , et al.	435/36
44	US 5877022 A	19990302	Ribozymes targeted to APO(a) RNA	Stinchcomb, Dan T. , et al.	435/37
45	US 5874304 A	19990223	Humanized green fluorescent protein genes and methods	Zolotukhin, Sergei , et al.	435/36
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50	US 5866696 A	19990202	Modified adeno-associated virus vector capable of expression from a	Carter, Barrie J. , et al.	536/23
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52	US 5863541 A	19990126	AAV capsid vehicles for molecular transfer	Samulski, Richard Jude , et al.	424/19
53	US 5861314 A	19990119	Adeno-associated viral (AAV) liposomes and methods related thereto	Philip, Ramila , et al.	435/37
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60	US 5859197 A	19990112	Neurogene	Theill, Lars E. , et al.	530/35
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62	US 5824655 A	19981020	Anti-transforming growth factor-.beta. gene therapy	Border, Wayne A.	514/44
63	US 5821235 A	19981013	Gene therapy using the intestine	Henning, Susan June , et al.	514/44
64	US 5817796 A	19981006	C-myb ribozymes having 2'-5'-linked adenylate residues	Stinchcomb, Dan T. , et al.	536/24
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68	US 5843742 A	19981201	Adeno-associated derived vector systems for gene delivery and	Natsoulis, Georges , et al.	435/46
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